that is securely and conspicuously attached to the component or its container.

(b) The approval marking shall be inscribed with the component's MSHA approval number and any additional markings required by the approval.

(c) The refuge alternative structure shall provide a conspicuous means for indicating an out-of-service status, including the reason it is out of service.

(d) The airlock shall be conspicuously marked with the recommended maximum number of persons that can use it at one time.

§ 7.510 New technology.

MSHA may approve a refuge alternative or a component that incorporates new knowledge or technology, if the applicant demonstrates that the refuge alternative or component provides no less protection than those meeting the requirements of this subpart.

PART 14—REQUIREMENTS FOR THE APPROVAL OF FLAME-RESISTANT CONVEYOR BELTS

Subpart A—General Provisions

Sec.

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SOURCE: 73 FR 80609, Dec. 31, 2008, unless otherwise noted.

Subpart A—General Provisions

§ 14.1 Purpose, effective date for approval holders.

This Part establishes the flame resistance requirements for MSHA approval of conveyor belts for use in underground coal mines. Applications for approval or extensions of approval submitted after December 31, 2008, must meet the requirements of this Part.

§ 14.2 Definitions.

The following definitions apply in this part:

Applicant. An individual or organization that manufactures or controls the production of a conveyor belt and applies to MSHA for approval of conveyor belt for use in underground coal mines.

Approval. A document issued by MSHA, which states that a conveyor belt has met the requirements of this Part and which authorizes an approval marking identifying the conveyor belt as approved.

Extension of approval. A document issued by MSHA, which states that a change to a product previously approved by MSHA meets the requirements of this Part and which authorizes the continued use of the approval marking after the appropriate extension number has been added.

Flame-retardant ingredient. A material that inhibits ignition or flame propagation.

Flammable ingredient. A material that is capable of combustion.

Inert ingredient. A material that does not contribute to combustion.

Post-approval product audit. An examination, testing, or both, by MSHA of an approved conveyor belt selected by MSHA to determine if it meets the technical requirements and has been manufactured as approved.

Similar conveyor belt. A conveyor belt that shares the same cover compound, general carcass construction, and fabric type as another approved conveyor belt.

§ 14.3 Observers at tests and evaluations.

Representatives of the applicant and other persons agreed upon by MSHA and the applicant may be present during tests and evaluations conducted

under this Part. However, if MSHA receives a request from others to observe tests, the Agency will consider it.

§ 14.4 Application procedures and requirements.

(a) *Application address.* Applications for approvals or extensions of approval under this Part may be sent to: U.S. Department of Labor, Mine Safety and Health Administration, Chief, Approval and Certification Center, 765 Technology Drive, Triadelphia, West Virginia 26059. Alternatively, applications for approval or extensions of approval may be filed online at *http://www.msha.gov* or faxed to: Chief, Mine Safety and Health Administration Approval and Certification Center at 304–547–2044.

(b) *Approval application.* Each application for approval of a conveyor belt for use in underground coal mines must include the information below, except any information submitted in a prior approval application need not be resubmitted, but must be noted in the application.

(1) A technical description of the conveyor belt, which includes:

(i) Trade name or identification number;

(ii) Cover compound type and designation number;

(iii) Belt thickness and thickness of top and bottom covers;

(iv) Presence and type of skim coat;

(v) Presence and type of friction coat;

(vi) Carcass construction (number of plies, solid woven);

(vii) Carcass fabric by textile type and weight (ounces per square yard);

(viii) Presence and type of breaker or floated ply; and

(ix) The number, type, and size of cords and fabric for metal cord belts.

(2) The name, address, and telephone number of the applicant's representative responsible for answering any questions regarding the application.

(c) Similar belts and extensions of approval may be evaluated for approval without testing using the BELT method if the following information is provided in the application:

(1) Formulation information on the compounds in the conveyor belt indicated by either:

(i) Specifying each ingredient by its chemical name along with its percentage (weight) and tolerance or percentage range; or

(ii) Specifying each flame-retardant ingredient by its chemical or generic name with its percentage and tolerance or percentage range or its minimum percent. List each flammable ingredient and inert ingredient by chemical, generic, or trade name along with the total percentage of all flammable and inert ingredients.

(2) Identification of any similar approved conveyor belt for which the applicant already holds an approval, and the formulation specifications for that belt if it has not previously been submitted to the Agency.

(i) The MSHA assigned approval number of the conveyor belt that most closely resembles the new one; and

(ii) An explanation of any changes from the existing approval.

(d) *Extension of approval.* Any change in an approved conveyor belt from the documentation on file at MSHA that affects the technical requirements of this Part must be submitted for approval prior to implementing the change. Each application for an extension of approval must include:

(1) The MSHA-assigned approval number for the conveyor belt for which the extension is sought;

(2) A description of the proposed change to the conveyor belt; and

(3) The name, address, and telephone number of the applicant's representative responsible for answering any questions regarding the application.

(e) MSHA will determine if testing, additional information, samples, or material is required to evaluate an application. If the applicant believes that flame testing is not required, a statement explaining the rationale must be included in the application.

(f) *Equivalent non-MSHA product safety standard.* An applicant may request an equivalency determination to this part under § 6.20 of this chapter, for a non-MSHA product safety standard.

(g) *Fees.* Fees calculated in accordance with Part 5 of this chapter must be submitted in accordance with § 5.40.

§ 14.5 Test samples.

Upon request by MSHA, the applicant must submit 3 precut, unrolled, flat conveyor belt samples for flame testing. Each sample must be 60 ±¼ inches long (152.4 ±0.6 cm) by 9 ±⅛ inches (22.9 ±0.3 cm) wide.

§ 14.6 Issuance of approval.

(a) MSHA will issue an approval or notice of the reasons for denying approval after completing the evaluation and testing provided in this part.

(b) An applicant must not advertise or otherwise represent a conveyor belt as approved until MSHA has issued an approval.

§ 14.7 Approval marking and distribution records.

(a) An approved conveyor belt must be marketed only under the name specified in the approval.

(b) Approved conveyor belt must be legibly and permanently marked with the assigned MSHA approval number for the service life of the product. The approval marking must be at least ½ inch (1.27 cm) high, placed at intervals not to exceed 60 feet (18.3 m) and repeated at least once every foot (0.3 m) across the width of the belt.

(c) Where the construction of a conveyor belt does not permit marking as prescribed above, other permanent marking may be accepted by MSHA.

(d) Applicants granted approval must maintain records of the initial sale of each belt having an approval marking. The records must be retained for at least 5 years following the initial sale.

§ 14.8 Quality assurance.

Applicants granted an approval or an extension of approval under this Part must:

(a) In order to assure that the finished conveyor belt will meet the flame-resistance test—

(1) Flame test a sample of each batch, lot, or slab of conveyor belts; or

(2) Flame test or inspect a sample of each batch or lot of the materials that contribute to the flame-resistance characteristic.

(b) Calibrate instruments used for the inspection and testing in paragraph (a) of this section according to the instrument manufacturer's specifications. Instruments must be calibrated using standards set by the National Institute of Standards and Technology, U.S. Department of Commerce or other nationally or internationally recognized standards. The instruments used must be accurate to at least one significant figure beyond the desired accuracy.

(c) Control production so that the conveyor belt is manufactured in accordance with the approval document. If a third party is assembling or manufacturing all or part of an approved belt, the approval holder shall assure that the product is manufactured as approved.

(d) Immediately notify the MSHA Approval and Certification Center of any information that a conveyor belt has been distributed that does not meet the specifications of the approval. This notification must include a description of the nature and extent of the problem, the locations where the conveyor belt has been distributed, and the approval holder's plans for corrective action.

§ 14.9 Disclosure of information.

(a) All proprietary information concerning product specifications and performance submitted to MSHA by the applicant will be protected.

(b) MSHA will notify the applicant or approval holder of requests for disclosure of information concerning its conveyor belts, and provide an opportunity to present its position prior to any decision on disclosure.

§ 14.10 Post-approval product audit.

(a) Approved conveyor belts will be subject to periodic audits by MSHA to determine conformity with the technical requirements upon which the approval was based. MSHA will select an approved conveyor belt to be audited; the selected belt will be representative of that distributed for use in mines. Upon request to MSHA, the approval holder may obtain any final report resulting from the audit.

(b) No more than once a year, except for cause, the approval holder, at MSHA's request, must make 3 samples of an approved conveyor belt of the size specified in § 14.5 available at no cost to MSHA for an audit. If a product is not

available because it is not currently in production, the manufacturer will notify MSHA when it is available. Representatives of the applicant and other persons agreed upon by MSHA and the applicant may be present during audit tests and evaluations. MSHA will also consider requests by others to observe tests.

(c) A conveyor belt will be subject to audit for cause at any time MSHA believes the approval holder product is not in compliance with the technical requirements of the approval.

§ 14.11 Revocation.

(a) MSHA may revoke for cause an approval issued under this Part if the conveyor belt—

(1) Fails to meet the technical requirements; or

(2) Creates a danger or hazard when used in a mine.

(b) Prior to revoking an approval, the approval holder will be informed in writing of MSHA's intention to revoke. The notice will—

(1) Explain the reasons for the proposed revocation; and

(2) Provide the approval holder an opportunity to demonstrate or achieve compliance with the product approval requirements.

(c) Upon request to MSHA, the approval holder will be given the opportunity for a hearing.

(d) If a conveyor belt poses an imminent danger to the safety or health of miners, an approval may be immediately suspended without written notice of the Agency's intention to revoke.

Subpart B—Technical Requirements

§ 14.20 Flame resistance.

Conveyor belts for use in underground coal mines must be flame-resistant and:

(a) Tested in accordance with § 14.22 of this part; or

(b) Tested in accordance with an alternate test determined by MSHA to be equivalent under 30 CFR §§ 6.20 and 14.4(e).

§ 14.21 Laboratory-scale flame test apparatus.

The principal parts of the apparatus used to test for flame resistance of conveyor belts are as follows—

(a) A horizontal test chamber 66 inches (167.6 cm) long by 18 inches (45.7 cm) square (inside dimensions) constructed from 1 inch (2.5 cm) thick Marinite I®, or equivalent insulating material.

(b) A 16-gauge (0.16 cm) stainless steel duct section which tapers over a length of at least 24 inches (61 cm) from a 20 inch (51 cm) square cross-sectional area at the test chamber connection to a 12 inch (30.5 cm) diameter exhaust duct, or equivalent. The interior surface of the tapered duct section must be lined with ½ inch (1.27 cm) thick ceramic blanket insulation, or equivalent insulating material. The tapered duct must be tightly connected to the test chamber.

(c) A U-shaped gas-fueled impinged jet burner ignition source, measuring 12 inches (30.5 cm) long and 4 inches (10.2 cm) wide, with two parallel rows of 6 jets each. Each jet is spaced alternately along the U-shaped burner tube. The 2 rows of jets are slanted so that they point toward each other and the flame from each jet impinges upon each other in pairs. The burner fuel must be at least 98 percent methane (technical grade) or natural gas containing at least 96 percent combustible gases, which includes not less than 93 percent methane.

(d) A removable steel rack, consisting of 2 parallel rails and supports that form a 7 ±⅛ inches (17.8 ±0.3 cm) wide by 60 ±⅛ inches (152.4 ±0.3 cm) long assembly to hold a belt sample.

(1) The 2 parallel rails, with a 5 ±⅛ inches (12.7 ±0.3 cm) space between them, comprise the top of the rack. The rails and supports must be constructed of slotted angle iron with holes along the top surface.

(2) The top surface of the rack must be 8 ±⅛ inches (20.3 ±0.3 cm) from the inside roof of the test chamber.

§ 14.22 Test for flame resistance of conveyor belts.

(a) *Test procedures.* The test must be conducted in the following sequence

using a flame test apparatus meeting the specifications of §14.21:

(1) Lay three samples of the belt, 60 ±¼ inches (152.4 ±0.6 cm) long by 9 ±⅛ inches (22.9 ±0.3 cm) wide, flat at a temperature of 70 ±10 °Fahrenheit (21 ±5 °Centigrade) for at least 24 hours prior to the test;

(2) For each of three tests, place one belt sample with the load-carrying surface facing up on the rails of the rack so that the sample extends 1 ±⅛ inch (2.5 ±0.3 cm) beyond the front of the rails and 1 ±⅛ inch (2.5 ±0.3 cm) from the outer lengthwise edge of each rail;

(3) Fasten the sample to the rails of the rack with steel washers and cotter pins. The cotter pins shall extend at least ¾ inch (1.9 cm) below the rails. Equivalent fasteners may be used. Make a series of 5 holes approximately 9⁄32 inch (0.7 cm) in diameter along both edges of the belt sample, starting at the first rail hole within 2 inches (5.1 cm) from the front edge of the sample. Make the next hole 5 ±¼ inches (12.7 ±0.6 cm) from the first, the third hole 5 ±¼ inches (12.7 ±0.6 cm) from the second, the fourth hole approximately midway along the length of the sample, and the fifth hole near the end of the sample. After placing a washer over each sample hole, insert a cotter pin through the hole and spread it apart to secure the sample to the rail;

(4) Center the rack and sample in the test chamber with the front end of the sample 6 ±½ inches (15.2 ±1.27 cm) from the entrance;

(5) Measure the airflow with a 4-inch (10.2 cm) diameter vane anemometer, or an equivalent device, placed on the centerline of the belt sample 12 ±½ inches (30.5 ±1.27 cm) from the chamber entrance. Adjust the airflow passing through the chamber to 200 ±20 ft/min (61 ±6 m/min);

(6) Before starting the test on each sample, the inner surface temperature of the chamber roof measured at points 6 ±½, 30 ±½, and 60 ±½ inches (15.2 ±1.27, 76.2 ±1.27, and 152.4 ±1.27 cm) from the front entrance of the chamber must not exceed 95 °Fahrenheit (35 °Centigrade) at any of these points with the specified airflow passing through the chamber. The temperature of the air entering the chamber during the test on each sample must not be less than 50 °Fahrenheit (10 °Centigrade);

(7) Center the burner in front of the sample's leading edge with the plane, defined by the tips of the burner jets, ¾ ±⅛ inch (1.9 ±0.3 cm) from the front edge of the belt;

(8) With the burner lowered away from the sample, set the gas flow at 1.2 ±0.1 standard cubic feet per minute (SCFM) (34 ±2.8 liters per minute) and then ignite the gas burner. Maintain the gas flow to the burner throughout the 5 to 5.1 minute ignition period;

(9) After applying the burner flame to the front edge of the sample for a 5 to 5.1 minute ignition period, lower the burner away from the sample and extinguish the burner flame;

(10) After completion of each test, determine the undamaged portion across the entire width of the sample. Blistering without charring does not constitute damage.

(b) *Acceptable performance.* Each tested sample must exhibit an undamaged portion across its entire width.

(c) MSHA may modify the procedures of the flammability test for belts constructed of thicknesses more than ¾ inch (1.9 cm).

§14.23 New technology.

MSHA may approve a conveyor belt that incorporates technology for which the requirements of this part are not applicable if the Agency determines that the conveyor belt is as safe as those which meet the requirements of this part.

PART 15—REQUIREMENTS FOR APPROVAL OF EXPLOSIVES AND SHEATHED EXPLOSIVE UNITS

Subpart A—General Provisions

Sec.

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